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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/781,153	KOKADO ET AL.				
Office Action Summary	Examiner	Art Unit				
· · · · · · · · · · · · · · · · · · ·	Mohammad A Siddiqi	2154				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply if NO period for reply is specified above, the maximum statutory period we Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).				
Status						
2a) ☐ This action is FINAL . 2b) ☐ This 3) ☐ Since this application is in condition for alloward	, —					
Disposition of Claims						
4) Claim(s) 35-68 is/are pending in the application 4a) Of the above claim(s) 1-34 is/are withdrawn 5) Claim(s) is/are allowed. 6) Claim(s) 35-68 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or	from consideration.					
Application Papers						
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction of the oath or declaration is objected to by the Examine 11).	epted or b) objected to by the Eddrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of	s have been received. s have been received in Application ity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:					

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DETAILED ACTION

1. Claims 35-68 are presented for examination. Claims 1-34 have been cancelled.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/22/2005 has been entered.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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4. Claims 35-40, 44, 47, 52-63, and 67-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jorgensen et al. (6,862,622) (hereinafter Jorgensen) in view of Miller et al. (5,920,701) (hereinafter Miller).

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5. As per claims 35 and 52, Jorgensen discloses data transmission system and method in which a server (server computer connected to the data network, col 25, lines 10-12) is operable to transmit content data (transmit packetized data such as video, data, and IP telephony, col 6, lines 5-9) that is designated by a content reservation request which is issued by a data terminal device for the content data, said server being operable to transmit the content data through one of a plurality of communications circuits (wireless network and data network, col 3, lines 30-41) to a data circuit terminating device which is connected to said data terminal device for storing the content data (fig 3B, 1000, CPE station, col 3, lines 30-41), wherein:

said plurality of communications circuits are connected in parallel between said server and said data circuit terminating device (routers are routing to wireless and data network links 136f, 140f, 140d,140e, fig 2D and fig 3B, 1000, CPE station, col 3, lines 30-41);

each of said plurality of communication circuits (routers are routing to wireless and data network links 136f, 140f, 140d, 140e, fig 2D and fig 3B,

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1000, CPE station, col 3, lines 30-41) is operable to communicate the content data to said data terminal device (transmit packetized data such as video, data, and IP telephony, col 6, lines 5-9);

each of said plurality of communication circuits is operable to provide communication between (routers are routing to wireless and data network links 136f, 140f, 140d, 140e, fig 2D and fig 3B, 1000, CPE station, col 3, lines 30-41) said server (136f, fig 2D) and said data terminal device through different means (data network and wireless, fig 3B, 1000, CPE station, col 3, lines 30-41);

and to select one of said plurality of communications circuits which provides the most optimal means for communication between said server (best path, links 136f, 140f, 140d, 140e, fig 2D, col 30, lines 44-47) and said data circuit terminating device (routers are routing to wireless and data network links 136f, 140f, 140d, 140e, fig 2D and fig 3B, 1000, CPE station, col 3, lines 30-41).

Jorgensen in entirety discloses reservation request by subscriber CPE (col 52, lines 14-26). Jorgensen does not explicitly discloses the content reservation request indicates a time limit in which the content data that is designated by said data terminal device is to be available in said data circuit terminating device; either said server or any one of said plurality of communications circuits comprises: a time limit management part operable

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to manage the time limit indicated by the content reservation request issued from said data terminal device; and a scheduling part, based on both the time limit managed in said time limit management part and predetermined communications information, operable to determine a transmission time, to ensure that the content data is completely transmitted by the indicated time limit; and said server comprises a data send out part operable to send out the content data onto the determined optimal server one of said plurality of communications circuits according to the transmission time that is determined by said scheduling part. However, Miller discloses the content reservation request indicates a time limit (completed by the requested delivery time, col 4, lines 47-56) in which the content data that is designated by said data terminal device is to be available in said data circuit terminating device (col 4, lines 47-59); either said server or any one of said plurality of communications circuits comprises (fig 1, col 4, lines 35-40): a time limit management part operable to manage the time limit indicated by the content reservation request issued from said data terminal device (10, fig 1, scheduler, col 4, lines 35-56); and a scheduling part (10, fig 1, scheduler, col 4, lines 35-56), based on both the time limit managed in said time limit management part and predetermined communications information (scheduler, col 4, lines 51-54), to ensure that the content data is completely transmitted by the indicated time limit

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(delivered by the request delivery time, col 4, lines 45-59); and said server comprises a data send out part operable to send out the content data onto the determined optimal server (determining bandwidth, col 2, lines 19-31) one of said plurality of communications circuits according to the transmission time that is determined by said scheduling part (col 4, lines 35-59). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Jorgensen and Miller. The motivation would have been transmitting data from one or more content servers over a multi channel network system (wireless and data network) to the subscribers based on their request.

- 6. As per claim 36, the claim is rejected for the same reasons as claim 35, above. In addition, Miller discloses the predetermined communications information indicates at least one of a size of the content data that is designated by the content reservation request and the number of data terminal devices to which the content data is addressed (parameters, col 4, lines 45-56).
- 7. As per claim 37, the claim is rejected for the same reasons as claim 35, above. In addition, Jorgensen discloses data circuit terminating device operates while receiving power from any one of said plurality of

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communications circuits (1000, 120d,fig 3B, CPE station, col 3, lines 30-41 and col 40 lines 59-67).

- 8. As per claim 38, the claim is rejected for the same reasons as claim 35, above. In addition, Miller discloses a content storage operable to store the content data transmitted over the determined optimal one of said subscriber channel into a recording area thereof (col 4, lines 35-40); and a data transmission part operable to read, from said content storage (col 4, lines 40-45), the content data that is designated by a read request issued from said data terminal device for the content data to be transmitted to said data terminal device (col 4, lines 35-59).
- 9. As per claim 39, the claim is rejected for the same reasons as claim 35, above. In addition, Miller discloses after reading the content data that is designated by the read request (col 2 lines 10-14), said data transmission part is also operable to read content data that is not designated by the read request (adding content, col 2, lines 11-20), and to transmit a set of the read content data to the data terminal device (col 2, lines 11-31).
- 10. As per claim 40, the claim is rejected for the same reasons as claim 35, above. In addition, Miller discloses data circuit terminating device is

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operable to transmit a storage completion notice to said data terminal device indicating that the content data is successfully stored in the recording area of said content storage (col 3, lines 8-11).

- 11. As per claim 44, the claim is rejected for the same reasons as claim 35, above. In addition, Miller discloses at least one of said plurality of communications circuits includes a recording area management unit operable to manage the recording area of said data circuit terminating device, and in response to a request from said server, said recording area management unit is operable to transmit a recording area reserve instruction to request said data circuit terminating device to reserve a space in the recording area for the content data (storing, col 6, lines 36-51).
- 12. As per claim 47, Miller discloses system includes at least one additional data circuit terminating device, said data circuit terminating device and said at least one additional data circuit terminating device constituting a plurality of data circuit terminating devices, and any one of said plurality of data circuit terminating devices is operable to acquire content data that is stored in a content storage area of another one of said plurality of data circuit terminating devices (col 5, lines 4, lines 35-59 and col 5, lines 36-51).

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13. As per claim 53, the claim is rejected for the same reasons as claim 35, above. In addition, Miller discloses a status data generation part operable to generate content reservation status data listing at least one download condition (col 2, lines 19-22) which is indicative of at least one of a transmission time and a transmission cost for content data that is available to be transmitted from said server (col 2, lines 11-14); and

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a data transmission part operable to transmit the content reservation status data generated by said status data generation part to the number of said plurality of data terminal devices (scheduler, col 4, lines 35-59);

wherein said data transmission system is operable to collect from the number of said plurality of data terminal devices a corresponding number of content reservation requests each indicating a download condition for downloading the content data to the number of said plurality of data terminal devices, respectively (parameter, col 4, lines 35-55);

wherein said data transmission system further comprises:

a download condition management part operable to manage (parameters, col 4, lines 35-40) the content data and the at least one download condition in accordance with the number of content reservation requests received from the number of said plurality of data terminal devices (col 4, lines 45-59);

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a scheduling part operable to determine, based on the at least one download condition managed in said download condition management part (col 4, lines 45-59), a transmission timing which ensures that the content data transmitted under the download condition (col 4, lines 45-59) is completely received by the number of said plurality of data terminal devices in accordance with the download condition indicated by the content reservation request received from each of the number of said plurality of data terminal devices (col 4, lines 35-59), and

a data send out part operable to send out the content data onto one of said plurality of communications circuits according to the transmission timing determined by said scheduling part (col 4, lines 35-59).

- 14. As per claim 54, the claim is rejected for the same reasons as claim 35, above. In addition, Miller discloses the download condition is a time limit in which the content data that is designated by at least one of said plurality of data terminal devices is to be ready in any one of said data terminal devices (col 2, lines 19-29).
- 15. As per claim 55, the claim is rejected for the same reasons as claim 35, above. In addition, Miller discloses an acceptance processing part operable to accept the content reservation request, and to determine, based

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on how many other data terminal devices of said plurality of data terminal devices (fig 1) are induced to receive the content data by the time limit, a transmission expense for the content data (total transmission time, bandwidth, priority, col 2, lines 19-37).

- 16. As per claim 56, the claim is rejected for the same reasons as claim 35, above. In addition, Miller discloses acceptance processing part is operable to refer to a time margin that is left for a new time limit to determine the transmission expense for the content data when the content reservation request that is issued from one of said plurality of data terminal devices carries the new time limit which is not indicated by the content reservation status data (bandwidth, col 2, lines 19-37 and col 3, lines 8-19).
- 17. As per claim 57, the claim is rejected for the same reasons as claim 35, above. In addition, Miller discloses the download condition is a transmission expense for the content data that is designated by the content reservation request issued from one of said plurality of data terminal devices (bandwidth, time, col 2, lines 11-31), said transmission system further comprises an acceptance processing part operable to accept the content reservation request from the one of said plurality of data terminal devices, and to determine, based on how many other data terminal devices of said

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plurality of data terminal devices are requesting for the content data to be transmitted by the time limit, the transmission expense for the content data (col 2, lines 11-31), and

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said data send out part is operable to send out the content data designated by the content reservation request onto one of said plurality of communications circuits when the transmission expense determined by said acceptance processing part becomes equal to or less than a predetermined value (col 2, lines 1-10 and lines 20-37).

18. As per claim 58, the claim is rejected for the same reasons as claim 35, above. In addition, Miller discloses the download condition is the number of other data terminal devices of said plurality of data terminal devices requesting for the content data to be transmitted (col 4, lines 10-31), said data transmission system further comprises an acceptance processing part operable to accept the content reservation request from one of said plurality of data terminal devices, and to determine, based on how many other data terminal devices of said plurality of data terminal devices are requesting the content data to be transmitted (priority, col 2, lines 11-20), a transmission expense for the content data, and said data send out part is operable to send out the content data designated by the content reservation request onto one of said plurality of communications circuit when the number of

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content reservation requests that are accepted by said acceptance processing part becomes equal to or larger than a predetermined value (col 2, lines 1-10 and lines 20-37).

- 19. As per claim 59, the claim is rejected for the same reasons as claim 35, above.
- 20. As per claim 60, the claim is rejected for the same reasons as claim 35, above.
- 21. As per claim 61, the claim is rejected for the same reasons as claims 36 and 38, above.
- 22. As per claim 62, the claim is rejected for the same reasons as claim 38, above.
- 23. As per claim 63, the claim is rejected for the same reasons as claim 35, above. In addition, Miller discloses selection condition list is generated based on a keyword that is inputted into said data terminal device by a user (table, col 7, lines 19-50).

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24. As per claim 67, the claim is rejected for the same reasons as claim 35, above. In addition, Miller discloses a content storage operable to store, from the content data set received from the determined optimal one of said plurality of communications circuits, only the content data satisfying the predetermined selection condition (col 5, lines 35-51), and a data transmission part operable to read the content data stored in said content storage for the content data to be transmitted to said data terminal device in response to a read request issued from said data terminal device for the content data. (col 2, lines 11-31)

- 25. As per claim 68, the claim is rejected for same reasons as claim 35, above.
- 26. Claims 41-43, 45,46, 48 and 64-66 are rejected under 35
 U.S.C. 103(a) as being unpatentable over Jorgensen et al. (6,862,622)
 (hereinafter Jorgensen) in view of Miller et al. (5,920,701) (hereinafter Miller) as applied to claim 35 above, and further in view of Berstis et al. (6,182,122) (hereinafter Berstis).
- 27. As per claim 41, Miller discloses the storage completion notice (col 3, lines 8-11). Miller fails to disclose, format of HTML. However, HTML format is

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well known in the art. Berstis, for example, discloses format of HTML (col 9, lines 50-51). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of Jorgensen and Miller with Berstis. The motivation would have been to provide industry standard HTML formatting.

- 28. As per claim 42, the claim is rejected for the same reasons as claim 41, above. In addition Berstis discloses sending an e-mail (col 4, line 2).
- 29. As per claim 43, the claim is rejected for the same reasons as claim 41, above. Berstis discloses in various formats, in a format that is designated by a user of said data terminal device (col 1, lines 47-54 and col 4, lines 55-60 and col 9, lines 37-46).
- 30. As per claim 45, Miller discloses data circuit terminating device inquires said server through memory processing whether the content data has been updated when the content data that is requested by said data terminal device is popular, said server is operable to, when the content data has been updated, responsively transmit the updated content data to said data circuit terminating device, and said data circuit terminating device is operable to store the updated content data received from said server into

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said content storage (storing, col 6, lines 36-51). Miller fails to disclose cache. However, cache term is used for the temporary memory is well known in the art. Berstis, for example, discloses cache (pre-caching, col 5, lines 32-41 and col 6, lines 54-55). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of Jorgensen and Miller with Berstis. The motivation would have been to provide faster access to the data without doing extra I/O to the disk.

- 31. As per claim 46, the claim is rejected for the same reasons as claim 45, above. In addition, Miller discloses the recording area of said content storage is divided into a plurality of smaller areas, and said data circuit terminating device is operable to assign each different smaller area to store the content data acquired by the content reservation request and the content data acquired through the memory processing (col 5, lines 36-51).
- 32. As per claim 48, the claim is rejected for the same reasons as claim 46, above. In addition, Miller discloses said data circuit terminating device is operable to, inquire said server when the communications traffic on the determined optimal one of said plurality of communications circuits is low (col 3, lines 45-56).

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33. As per claim 64, Berstis discloses data circuit terminating device further comprises a data deletion part operable to delete the content data set stored in said content storage within a predetermined timing (col 8, lines 1-12). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Jorgensen and Miller with Berstis. The motivation would have been to provide a system of capturing unused storage space.

- 34. AS per claim 65, the claim is rejected for the same reasons as claim 64, above. In addition, Miller discloses content storage when a recording capacity of said content storage becomes smaller than a predetermined reference recording capacity (col 2, lines 28-47).
- 35. As per claim 66, the claim is rejected for the same reasons as claim 64, above.
- 36. Claims 49-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jorgensen et al. (6,862,622) (hereinafter Jorgensen) in view of Miller et al. (5,920,701) (hereinafter Miller) as applied to claim 35 above, and further in view of Schweitzer et al (6,418,467) (hereinafter (Schweitzer).

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37. As per claim 49, Schweitzer discloses circuit terminating device is implemented with a protocol to function as a mail server, and is operable to perform transmission and reception of an e-mail (col 5, lines 16-21). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Jorgensen and Miller with Schweitzer. The motivation would have been to have a system with e-mal server which can send e-mail messages to different users.

- 38. As per claim 50, the claim is rejected for the same reasons as claim 49, above.
- 39. As per claim 51, the claim is rejected for same reasons as claim 49, above. In addition Miller discloses the notification is assigned a priority indicating an importance of the notification, and said data circuit terminating device is operable to change a timing for sending out the notification onto the determined optimal one of said plurality of communications circuits according to the priority assigned to the request (col 3, lines 8-23).

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Response to Arguments

40. Applicant's arguments with respect to claims 35-68 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

- 1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:
 - U.S. Patent 6,272,132.
 - U.S. Patent 6,587,438.
 - U.S. Patent 6,151,137.
 - U.S. Patent 6,546,488.
 - U.S. Patent 6,263,201

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad A Siddiqi whose telephone number is (571) 272-3976. The examiner can normally be reached on Monday -Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on (571) 272-

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3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MAS